No. 8200119

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Pioneer Hi-Bred International, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH ISHEREUNTOANNEXEDANDMADEAPART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'9561'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington *this* 30th *day of* June *in the year of our Lord one thousand nine hundred and* eighty-three.

Attest:

Kenneth A. Evans
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

John R Block
Secretary of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK< POULTRY, GRAIN & SEED DIVISION

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

FORM APPROVED
OMB NO. 40-R3822

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C.553).

1a. TEMPORARY DESIGNATION OF VARIETY	1b. VARIETY NAME	FOR OFFICIAL USE ONLY
9561	9561	PV NUMBER 8200119

2. KIND NAME	3. GENUS AND SPECIES NAME	FILING DATE	TIME
Soybean	Glycine max	5/11/82	10:30 A.M. XXX
4. FAMILY NAME (BOTANICAL)	**5. DATE OF DETERMINATION**	**FEE RECEIVED**	**DATE**
Leguminosae	October, 1976 January, 1980(increase)	$ 500.00 $ 250.00	5/11/82 5/23/83

6. NAME OF APPLICANT(S)	7. ADDRESS (*Street and No. or R.F.D. No., City,* State, *and* ZIP *Code*)	8. TELEPHONE AREA CODE AND NUMBER
Pioneer Hi-Bred International, Inc.	1206 Mulberry Street Des Moines, Iowa *50308*	(319)277-1733

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (*Corporation, partnership, association,* etc.)	10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION	11. DATE OF INCORPORATION
Corporation	Iowa	1926

12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS:

Clark W. Jennings
Box 854
Cedar Falls, Iowa 50613

Dale L. Porter
1206 Mulberry Street
Des Moines, Iowa *50308*

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- ☐ 13A. **Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the *Plant Variety* Protection Act.)**
- ☒ 13B. **Exhibit B, Novelty Statement.**
- ☐ 13C. **Exhibit C, Objective Description of the Variety** ***(Request form from Plant Variety* Protection *Office.)***
- ☐ 13D. **Exhibit D, Additional Description of the Variety.**

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? **(See Section 83(a).** *(If "Yes," answer 14B and 14C below.)* ☐ YES ☒ NO

14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? ☐ YES ☐ NO

14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? ☐ YES ☐ NO *(If "Yes," give name of countries and dates.)*

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? ☐ YES ☐ NO *(If "Yes," give* **name** *of countries and dates.)*

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? ☒ YES ☐ NO

17. **The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.**

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of-Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

April 27, 1982
(DATE)

Clark Jennings
(SIGNATURE OF APPLICANT)

(DATE)

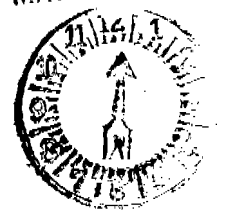
(SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and $500 fee ($250 filing fee and $250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

5 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.



13a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.

13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.

13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.

13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.

14a If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)

15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

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Attachment: 9561 Soybean (April, 1982)

Exhibit A: Variety 9561 evolved from a cross of Mack X Forrest. It is an F_6-derived variety which was advanced to the F_6 generation by modified single-seed descent. The F7 progeny row of 9561 was grown in Mississippi during the summer of 1976. Subsequently, 9561 has undergone five years of extensive testing and purification and has been observed by the breeder to be uniform and stable for all plant traits from generation to generation, with no evidence of variants.

1.0 acre of 9561 (pedigree seed) was grown in 1980. 25 acres of parent seedstock were grown in 1981.

Exhibit B: Variety 9561 is most similar to the variety Forrest. However, 9561 is significantly taller than Forrest by 8 cm. (See Table 1.

Attachment: Exhibit B, Variety 9561

Table 1. Paired Comparison (Plant Height-inches) 1979-81

YR/ EXP/ **LOC#**	FORREST(X_1)	9561 (X_2)	(X_2-X_1)	(X_2-X_1)^2
81/UNA5/68	36.3	38.7	2.4	5.76
81/UNA5/70	41.3	43.0	1.7	2.89
81/UNA5/71	26.0	32.3	6.3	39.69
81/UNA5/75	44.7	45.7	**1.0**	**1.00**
81/UNA5/84	28.0	32:0	4.0	**16.00**
81/GRA5/77	37.0	38.3	1.3	**1.69**
81/GRA5/78	25.0	31.0	6.0	36.00
81/GRA5/86	41.0	43.0	2.0	4.00
81/GRA5B1/77	37.5	43.0	5.5	30.25
81/GRA5B1/78	28.0	32.0	4.0	16.00
81/GRA5B1/81	28.0	29.0	1.0	**1.00**
81/UNA5B1/68	36.3	40.7	4.4	**19.36**
81/GRV5/80	33.0	33.5	0.5	0.25
80/GRA5/78	31.5	33.5	2.0	4.00
80/GRA5/79	30.0	33.0	3.0	9.00
80/GRV5/70	42.0	44.7	2.7	7.29
79/GRA5/73	23.7	27.0	3.3	10.89
79/GRA5/75	32.3	33.7	1.4	1.96
79/GRA5/78	28.5	31.0	2.5	6.25
Σ			55.0	213.28
$\bar{X}$	33.2(84cm)	36.1(92cm)		

$$s_{\bar{d}} = \sqrt{\frac{213.28 - [(55.0)^2/19]}{19(18)}} = 0.40$$

$$t = \frac{\bar{d}}{s_{\bar{d}}} = \frac{36.1 - 33.2}{0.40} = 7.25 \text{ ** for 18 df}$$

FORM APPROVED: OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN & SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20706

EXHIBIT C
(Soybean)

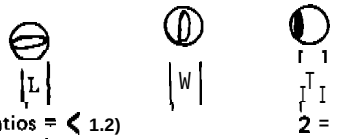
OBJECTIVE DESCRIPTION OF VARIETY
SOYBEAN (Glycine max L.)

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
Pioneer Hi-Bred International. Inc.		9561
ADDRESS *(Street and No., or R. F. D. No., City, State, and Zip Code)*		FOR OFFICIAL USE ONLY
1206 Mulberry Street Des Moines, Iowa 50308		PVPO-NUMBER 8200119

Choose the appropriate response which characterizes the variety in the features described below. When the number of significant digits in your answer is fewer than the number of boxes provided, place a zero in the first box when number is 9 or less (e.g., [0][9]).

1. SEED SHAPE:

[1]



1 = Spherical (L/W, L/T, and T/W ratios = < 1.2)
2 = Spherical Flattened (L/W ratio > 1.2; L/T ratio = < 1.2)
3 = Elongate (L/T ratio > 1.2; T/W = < 1.2)
4 = Elongate Flattened (L/T ratio > 1.2; T/W > 1.2)

2. SEED COAT COLOR: (Mature Seed)

[1] 1 = Yellow 2 = Green 3 = Brown 4 = Black 5 = Other *(Specify)* _____

3. SEED COAT LUSTER: (Mature Hand Shelled Seed)

[1] 1 = Dull ('Corsoy 79'; 'Braxton') 2 = Shiny ('Nebsoy'; 'Gasoy 17')

4. SEED SIZE: (Mature Seed)

[1][5][5] Grams per 100 seeds

5. HILUM COLOR: (Mature Seed)

a [6] 1 = Buff 2 = Yellow 3 = Brown 4 = Gray 5 = Imperfect Black 6 = Black 7 = *Other (Specify)* _____

6. COTYLEDON COLOR: (Mature Seed)

[1] 1 = Yellow 2 = Green

7. SEED PROTEIN PEROXIDASE ACTIVITY:

[ ] 1 = Low 2 = Higli

8. SEED PROTEIN ELECTROPHORETIC BAND:

[ ] 1 = Type A ($SP1^a$) 2 = Type B ($SP1^b$)

9. HYPOCOTY L COLOR:

c [2] 1 = Grean only ('Evans'; 'Davis') 2 = Green with bronze band below cotyledons ('Woodworth'; 'Tracy')
3 = Light Purple below cotyledons ('Beeson': 'Pickett 71')
4 = Dark Purple extending to unifoliate leaves ('Hodgson'; 'Coker Hampton 266A')

10. LEAFLET SHAPE:

c [3] 1 = Lanceolate 2 = Oval 3 = Ovate 4 = Other *(Specify)* _____

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11. LEAFLET SIZE:

[2] 1 = Small ('Amsoy 71'; 'A5312') 2 = Medium ('Corsoy 79'; 'Gasoy 17')
3 = Large ('Crawford'; 'Tracy')

12. LEAF COLOR:

[3] 1 = Light Green ('Weber'; 'York') 2 = Medium Green ('Corsoy 79'; 'Braxton')
3 = Dark Green ('Gnome'; 'Tracy')

13. FLOWER COLOR:

[1] 1 = White 2 = Purple 3 = White with purple throat

14. POD COLOR:

[1] 1 -Tan 2 = Brown 3 = Black

16. PLANT PUBESCENCE COLOR:

[2] 1 = Gray 2 = Brown (Tawny)

16. PLANT TYPES:

[1] 1 = Slender ('Essex'; 'Amsoy 71') 2 = Intermediate ('Amcor'; 'Braxton')
3 = Bushy ('Gnome'; 'Govan')

17. PLANT HABIT:

[1] 1 = Determinate ('Gnome'; 'Braxton') 2 = Semi-Determinate ('Will')
3 = Indeterminate ('Nebsoy'; 'Improved Pelican')

16. MATURITY GROUP:

[0][8] 1 = 000 2 = 00 3 = 0 4 = I 5 = II 6 = III 7 = IV 8 = V
9 = VI 10 = VII 11 = VIII 12 = IX 13 = x

16. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible: 2 = Resistant)

BACTERIAL DISEASES:

[2] Bacterial Pustule *(Xanthomonas phaseoli* var. *sojensis)*

[2] Bacterial Blight *(Pseudomonas glycinea)*

[2] Wildfire *(Pseudomonas tabaci)*

FUNGAL DISEASES:

[0] Brown Spot *(Septoria glycines)*

Frogeye Leaf *Spot (Cercospora sojina)*

[0] Race 1 [0] Race 2 [0] Race 3 [0] Race 4 [ ] Race 5 [0] Other *(Specify)*

[0] Target *Spot (Corynespora cassiicolal*

[0] Downy Mildew *(Peronospora trifoliorum* var. *manshurica)*

[0] Powdery Mildew *(Microsphaera diffusa)*

[0] Brown Stem Rot *(Cephalosporium gregatum)*

[0] Stem Canker *(Diaporthe phaseolorum var. caulivora)*

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19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant) (Continued)

FUNGAL DISEASES: (Continued)

c 0 Pod and Stem Blight *(Diaporthe phaseolorum* var; *sojae)*

a 0 Purple Seed Stain *(Cercospora kikuchii)*

c 0 Rhitoctonia Root Rot *(Rhizoctonia solani)*

Phytophthora *Rot Phytophthora megasperma* var. *sojael*

E 1 Race 1 c 1 Race 2 a 0 Race 3 [0] Race 4 c 0 Race 5 c 0 Race 6 c 0 Race 7

c 0 Race 8 a 0 Race 9 [0] Other *(Specify)* _____

VIRAL DISEASES:

c 0 Bud Blight (Tobacco Ringspot Virus)

[0] Yellow Mosaic (Bean Yellow Mosaic Virus)

c 0 Cowpea Mosaic (Cowpea Chlorotic Virus)

c 0 Pod Mottle (Bean Pod Mottle Virus)

a 0 Seed Mottle (Soybean Mosaic Virus)

NEMATODE DISEASES:

Soybean Cyst Nematode *(Heterodera glycines)*

[2] Race 1 c 0 Race 2 c 2 Race 3 [1] Race 4 a Other *(Specify)* _____

[0] Lance Nematode *(Hoplolaimus Colombus)*

a 0 Southern Root Knot Nematode *(Meloidogyne incognita)*

c 0 Northern Root Knot Nematode *(Meloidogyne Hapla)*

[0] Peanut Root Knot Nematode *(Meloidogyne arenaria)*

c 0 Reniform Nematode *(Rotylenchulus reniformis)*

c 0 OTHER DISEASE NOT ON FORM *(Specify):* _____

20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

[0] Iron Chlorosis on Calcareous Soil

a 0 Other *(Specify)* _____

21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

[0] Mexican Bean Beetle *(Epilachna varivestis)*

c 0 Potato Leaf Hopper *(Empoasca fabae)*

c 0 Other *(Specify)* _____

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant Shape	Forrest	Seed Coat Luster	Forrest
Leaf Shape	Forrest	Seed Size	Forrest
Leaf Color	Forrest	Seed Shape	Forrest
Leaf Size	Forrest	Seedling Pigmentation	Forrest
			b

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23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

VARIETY	NO. OF DAYS MATURITY	PLANT LODGING SCORE	CM PLANT HEIGHT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100 SEEDS	NO. SEEDS/ POD
				CM Width	CM Length	% Protein	% Oil		
Submitted 9561	127	2.0	92	62	----				
Name of Similar Variety Forrest	126	2.5	84	56	----				

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.

2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.

3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A2 in the USDA soybean germplasm collection. Crop Sci., 13: 420421.

4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Tachnol. 1: 1-19.

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